

FILTER ASSEMBLY

ABSTRACT

The filter assembly is adapted for use in filtering fluid flow in turbomachinery. The filter assembly includes a cylindrical housing, and a filter element disposed within the housing. The housing is adapted for fluid connection to a turbomachine. The filter element is adapted to filter fluid passing to the turbomachine. The filter element includes a fluid permeable core element defining a central core element flow channel through the filter element, a fluid permeable ion exchange resin layer disposed about the core element and adapted to remove mineral and organic acids from the fluid passing through the filter element, and a pleated filter media disposed about the ion exchange resin layer and core element. In another embodiment, the filter element has the pleated filter media disposed about the core element, and the fluid permeable ion exchange resin layer disposed about the core element and pleated filter media.